

**Subpart B—Requirements for Specific  
Standardized Vegetable Juices**

156.145 Tomato juice.

AUTHORITY: 21 U.S.C. 321, 341, 343, 348, 371.

**Subpart A—General Provisions****§ 156.3 Definitions.**

For the purpose of this part:

(a) *Strength and redness of color* means at least as much red as obtained by comparison of the prepared product, with the blended color produced by spinning a combination of the following concentric Munsell color discs of equal diameter, or the color equivalent of such discs:

Disc 1—Red (5R 2.6/13) (glossy finish)  
Disc 2—Yellow (2.5 YR 5/12) (glossy finish)  
Disc 3—Black (N1) (glossy finish)  
Disc 4—Grey (N4) (mat finish)

Such comparison is to be made in full diffused daylight or under a diffused light source of approximately 2691 lux (250 footcandles) and having a spectral quality approximating that of daylight under a moderately overcast sky, with a correlated color temperature of 7,500 degrees Kelvin  $\pm$ 200 degrees. With the light source directly over the disc and product, observation is made at an angle of 45 degrees from a distance of about 24 inches from the product. Electronic color meters may be used as an alternate means of determining the color of tomato juice. Such meters shall be calibrated to indicate that the color of the product is as red or more red than that produced by spinning the Munsell color discs in the combination as set out above.

(b) *Tomato soluble solids* means the sucrose value as determined by the method prescribed in "Official Methods of Analysis of the Association of Official Analytical Chemists," 13th Ed., 1980, sections 32.014 to 32.016 and 52.012, under the headings "Soluble Solids in Tomato Products Official Final Action" and "Refractive Indices (n) of Sucrose Solutions at 20°," which is incorporated by reference. Copies are available from the Association of Official Analytical Chemists International, 481 North Frederick Ave., suite 500, Gaithersburg, MD 20877-2504, or available for inspection at the Office of the Fed-

eral Register, 800 North Capitol Street, NW., suite 700, Washington, DC. If no salt has been added, the sucrose value obtained from the referenced tables shall be considered the percent of tomato soluble solids. If salt has been added, either intentionally or through the application of the acidified break, determine the percent of such added sodium chloride as specified in paragraph (c) of this section. Subtract the percentage so found from the percentage of tomato soluble solids found (sucrose value from the refractive index tables) and multiply the difference by 1.016. The resultant value is considered the percent of "tomato soluble solids."

(c) *Salt* means sodium chloride, determined as chloride and calculated as percent sodium chloride, by the method prescribed in "Official Methods of Analysis of the Association of Official Analytical Chemists," 13th Ed., 1980, sections 32.025 to 32.030, under the heading "Method III (Potentiometric Method)," which is incorporated by reference.

(d) *Compliance* means the following: Unless otherwise provided in a standard, a lot of canned vegetable juice shall be deemed in compliance for the following factors, to be determined by the sampling and acceptance procedure as provided in paragraph (e) of this section, namely:

(1) *Quality*. The quality of a lot shall be considered acceptable when the number of defectives does not exceed the acceptance number (c) in the sampling plans.

(2) *Fill of container*. A lot shall be deemed to be in compliance for fill of container when the number of defectives does not exceed the acceptance number (c) in the sampling plans.

(e) *Sampling and acceptance procedure* means the following:

(1) *Definitions*—(i) *Lot*. A collection of primary containers or units of the same size, type, and style manufactured or packed under similar conditions and handled as a single unit of trade.

(ii) *Lot size*. The number of primary containers or units in the lot.

(iii) *Sample size (n)*. The total number of sample units drawn for examination from a lot.

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(iv) *Sample unit.* A container, a portion of the contents of a container, or a composite mixture of product from small containers that is sufficient for the examination or testing as a single unit. For fill of container, the sample unit shall be the entire contents of the container.

(v) *Defective.* Any sample unit shall be regarded as defective when the sample unit does not meet the criteria set forth in the standards.

(vi) *Acceptance number (c).* The maximum number of defective sample units permitted in the sample in order to consider the lot as meeting the specified requirements.

(vii) *Acceptable quality level (AQL).* The maximum percent of defective sample units permitted in a lot that will be accepted approximately 95 percent of the time.

(2) *Sampling plans:*

ACCEPTABLE QUALITY LEVEL (AQL) 6.5

Lot size (primary containers)	Size of container	
	Net weight equal to or less than 1 kg (2.2 lb)	
	<i>n</i>	<i>c</i>
4,800 or less .....	13	2
4,801 to 24,000 .....	21	3
24,001 to 48,000 .....	29	4
48,001 to 84,000 .....	48	6
84,001 to 144,000 .....	84	9
144,001 to 240,000 .....	126	13
Over 240,000 .....	200	19
	Net weight greater than 1 kg (2.2 lb) but not more than 4.5 kg (10 lb)	
	<i>n</i>	<i>c</i>
2,400 or less .....	13	2
2,401 to 15,000 .....	21	3
15,001 to 24,000 .....	29	4
24,001 to 42,000 .....	48	6
42,001 to 72,000 .....	84	9
72,001 to 120,000 .....	126	13
Over 120,000 .....	200	19
	Net weight greater than 4.5 kg (10 lb)	
	<i>n</i>	<i>c</i>
600 or less .....	13	2
601 to 2,000 .....	21	3
2,001 to 7,200 .....	29	4
7,201 to 15,000 .....	48	6
15,001 to 24,000 .....	84	9

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ACCEPTABLE QUALITY LEVEL (AQL) 6.5—  
Continued

Lot size (primary containers)	Size of container	
24,001 to 42,000 .....	126	13
Over 42,000 .....	200	19

*n*=number of primary containers in sample.  
*c*=acceptance number.

[48 FR 3956, Jan. 28, 1983, as amended at 54 FR 24895, June 12, 1989; 63 FR 14035, Mar. 24, 1998]

Subpart B—Requirements for Specific Standardized Vegetable Juices

§ 156.145 Tomato juice.

(a) *Identity*—(1) *Definition.* Tomato juice is the food intended for direct consumption, obtained from the unfermented liquid extracted from mature tomatoes of the red or reddish varieties of *Lycopersicum esculentum* P. Mill, with or without scalding followed by draining. In the extraction of such liquid, heat may be applied by any method which does not add water thereto. Such juice is strained free from peel, seeds, and other coarse or hard substances, but contains finely divided insoluble solids from the flesh of the tomato in accordance with current good manufacturing practice. Such juice may be homogenized, may be seasoned with salt, and may be acidified with any safe and suitable organic acid. The juice may have been concentrated and later reconstituted with water and/or tomato juice to a tomato soluble solids content of not less than 5.0 percent by weight as determined by the method prescribed in § 156.3(b). The food is preserved by heat sterilization (canning), refrigeration, or freezing. When sealed in a container to be held at ambient temperatures, it is so processed by heat, before or after sealing, as to prevent spoilage.

(2) *Labeling.* (i) The name of the food is:

(a) “Tomato juice” if it is prepared from unconcentrated undiluted liquid extracted from mature tomatoes of reddish varieties.

(b) “Tomato juice from concentrate” if the finished juice has been prepared from concentrated tomato juice as